

## **REMARKS**

### **I. Introduction**

Claims 13 to 24 are pending in the present application. In view of the following remarks, it is respectfully submitted that all of the presently pending claims are allowable, and reconsideration is respectfully requested.

### **II. Rejection of Claims 13 to 15 Under 35 U.S.C. § 103(a)**

Claims 13 to 15 were rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of U.S. Patent No. 2,920,868 (“Ackerman et al.”), U.S. Patent No. 5,233,150 (“Schneebeli et al.”), and U.S. Patent No. 4,484,959 (“Boucher et al.”). It is respectfully submitted that the combination of Ackerman et al., Schneebeli et al., and Boucher et al. does not render unpatentable the present claims for at least the following reasons.

In order for a claim to be rejected for obviousness under 35 U.S.C. § 103(a), the prior art must teach or suggest each element of the claim. See Northern Telecom, Inc. v. Datapoint Corp., 908 F.2d 931, 934 (Fed. Cir. 1990), cert. denied, 111 S. Ct. 296 (1990); In re Bond, 910 F.2d 831, 834 (Fed. Cir. 1990). In addition, as clearly indicated by the Supreme Court, it is “important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements” in the manner claimed. See KSR Int’l Co. v. Teleflex, Inc., 127 S. Ct. 1727 (2007). Further, the Supreme Court in KSR noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. M.P.E.P. §2143.

Claim 13 relates to a method for at least one of (a) manufacturing and (b) repairing a component for a gas turbine by laser-powder build-up welding, including, the features of performing laser-powder build-up welding using at least one substructure, *the material built-up by a powder material occurring in the laser-powder build-up welding such that each substructure is enclosed on all sides by the built-up powder material.*

The combination of Ackerman et al., Schneebeli et al., and Boucher et al. does not disclose, or even suggest, all of the features included in claim 13. Ackerman et al. merely describes brazing walls 13, 14 together at joints 15, 16, 17 around a base portion 12 having a solid core member 18 and wire strands 19. Col. 2, lines 4 to 10, and 15 to 20. Nowhere does Ackerman et al. disclose the feature of

*laser-powder build-up welding*. Further, Ackerman et al. plainly states that the base portion 12 includes openings at opposite ends. Col. 2, lines 11 to 15; and Figures 1, 2, and 4. Thus, Ackerman et al. does not disclose the feature that *each substructure is enclosed on all sides by a built-up powder material*. In addition, Schneebeli et al. merely describes liquid welding. Col. 2, lines 15 to 19. Nowhere does Schneebeli et al. disclose the feature of *laser-powder build-up welding*. Further, Schneebeli et al. plainly shows that its foundation bodies 2, 22, 52, 72 are exposed after welding, and may be removed in a succeeding step. Col. 2, lines 5 to 6; and Figures 1, 2, 5, and 7. Thus, Schneebeli et al. does not disclose the feature that *each substructure is enclosed on all sides by a built-up powder material*. Moreover, Boucher et al. merely describes applying a coating to portions of rollers, shear blades, or wear plates. Boucher et al., Abstract. In this regard, Boucher et al. plainly shows that coatings 3, 5, 8, 9, 10, 14, 16 do not enclose all sides of the rollers, shear blades, or wear plates. Boucher et al., Figures 1 to 6. Thus, Boucher et al. does not disclose the feature that *each substructure is enclosed on all sides by a built-up powder material*. Therefore, the combination of Ackerman et al., Schneebeli et al., and Boucher et al. does not disclose, or even suggest, the features of *material built-up by a powder material occurring in a laser-powder build-up welding such that each substructure is enclosed on all sides by built-up powder material*.

Accordingly, it is respectfully submitted that the combination of Ackerman et al., Schneebeli et al., and Boucher et al. does not disclose, or even suggest, all of the features included in claim 13. Therefore, it is respectfully submitted that the combination of Ackerman et al., Schneebeli et al., and Boucher et al. does not render unpatentable claim 13 for at least the foregoing reasons.

As for claims 14 and 15, which ultimately depend from claim 13 and therefore include all of the features included in claim 13, it is respectfully submitted that the combination of Ackerman et al., Schneebeli et al., and Boucher et al. does not render unpatentable these dependent claims for at least the reasons more fully set forth above.

In view of all of the foregoing, withdrawal of this rejection is respectfully requested.

### **III. Rejection of Claims 16 to 18 Under 35 U.S.C. § 103(a)**

Claims 16 to 18 were rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Ackerman et al., Schneebeli et al., Boucher et al., and U.S. Patent No. 3,697,192 (“Hayes”). It is respectfully submitted that the combination of Ackerman et al., Schneebeli et al., Boucher et al., and Hayes does not render unpatentable the present claims for at least the following reasons.

Claims 16 to 18 ultimately depend from claim 13. As more fully set forth above, the combination of Ackerman et al., Schneebeli et al., and Boucher et al. does not disclose, or even suggest, all of the features included in claim 13. Hayes also does not disclose, or even suggest, all of the features included in claim 13, and thus, fails to cure this critical deficiency.

Accordingly, it is respectfully submitted that the combination of Ackerman et al., Schneebeli et al., Boucher et al., and Hayes does not disclose, or even suggest, all of the features included in claim 13, from which claims 16 to 18 ultimately depend. As such, it is respectfully submitted that the combination of Ackerman et al., Schneebeli et al., Boucher et al., and Hayes does not render unpatentable claims 16 to 18, which ultimately depend from claim 13.

In view of all of the foregoing, withdrawal of this rejection is respectfully requested.

### **IV. Rejection of Claims 19 to 22 Under 35 U.S.C. § 103(a)**

Claims 19 to 22 were rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Ackerman et al., Schneebeli et al., Boucher et al., and U.S. Patent No. 6,269,540 (“Islam et al.”). It is respectfully submitted that the combination of Ackerman et al., Schneebeli et al., Boucher et al., and Islam et al. does not render unpatentable the present claims for at least the following reasons.

Claims 19 to 22 ultimately depend from claim 13. As more fully set forth above, the combination of Ackerman et al., Schneebeli et al., and Boucher et al. does not disclose, or even suggest, all of the features included in claim 13. Islam et al. also does not disclose, or even suggest, all of the features included in claim 13, and thus, fails to cure this critical deficiency.

Accordingly, it is respectfully submitted that the combination of Ackerman et al., Schneebeli et al., Boucher et al., and Islam et al. does not disclose, or even suggest, all of the features included in claim 13, from which claims 19 to 22

ultimately depend. As such, it is respectfully submitted that the combination of Ackerman et al., Schneebeli et al., Boucher et al., and Islam et al. does not render unpatentable claims 19 to 22, which ultimately depend from claim 13.

In view of all of the foregoing, withdrawal of this rejection is respectfully requested.

**V. Rejection of Claim 23 Under 35 U.S.C. § 103(a)**

Claim 23 was rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Ackerman et al., Schneebeli et al., Boucher et al., Islam et al., and U.S. Patent No. 5,038,014 ("Pratt et al."). It is respectfully submitted that the combination of Ackerman et al., Schneebeli et al., Boucher et al., Islam et al., and Pratt et al. does not render unpatentable the present claim for at least the following reasons.

Claim 23 ultimately depends from claim 13. As more fully set forth above, the combination of Ackerman et al., Schneebeli et al., Boucher et al., and Islam et al. does not disclose, or even suggest, all of the features included in claim 13. Pratt et al. also does not disclose, or even suggest, all of the features included in claim 13, and thus, fails to cure this critical deficiency.

Accordingly, it is respectfully submitted that the combination of Ackerman et al., Schneebeli et al., Boucher et al., Islam et al., and Pratt et al. does not disclose, or even suggest, all of the features included in claim 13, from which claim 23 ultimately depends. As such, it is respectfully submitted that the combination of Ackerman et al., Schneebeli et al., Boucher et al., Islam et al., and Pratt et al. does not render unpatentable claim 23, which ultimately depends from claim 13.

In view of all of the foregoing, withdrawal of this rejection is respectfully requested.

**VI. Rejection of Claim 24 Under 35 U.S.C. § 103(a)**

Claim 24 was rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Ackerman et al., Schneebeli et al., Boucher et al., Islam et al., and U.S. Patent No. 6,682,253 ("Binna et al."). It is respectfully submitted that the combination of Ackerman et al., Schneebeli et al., Boucher et al., Islam et al., and

Binna et al. does not render unpatentable the present claim for at least the following reasons.

Claim 24 ultimately depends from claim 13. As more fully set forth above, the combination of Ackerman et al., Schneebeli et al., Boucher et al., and Islam et al. does not disclose, or even suggest, all of the features included in claim 13. Binna et al. also does not disclose, or even suggest, all of the features included in claim 13, and thus, fails to cure this critical deficiency.

Accordingly, it is respectfully submitted that the combination of Ackerman et al., Schneebeli et al., Boucher et al., Islam et al., and Binna et al. does not disclose, or even suggest, all of the features included in claim 13, from which claim 24 ultimately depends. As such, it is respectfully submitted that the combination of Ackerman et al., Schneebeli et al., Boucher et al., Islam et al., and Binna et al. does not render unpatentable claim 24, which ultimately depends from claim 13.

In view of all of the foregoing, withdrawal of this rejection is respectfully requested.

## **VII. Conclusion**

It is therefore respectfully submitted that all of the presently pending claims are allowable. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

Date: August 5, 2010

By: /Clifford A. Ulrich/  
Clifford A. Ulrich  
Reg. No. 42,194

KENYON & KENYON LLP  
One Broadway  
New York, New York 10004  
(212) 425-7200  
**CUSTOMER NO. 26646**